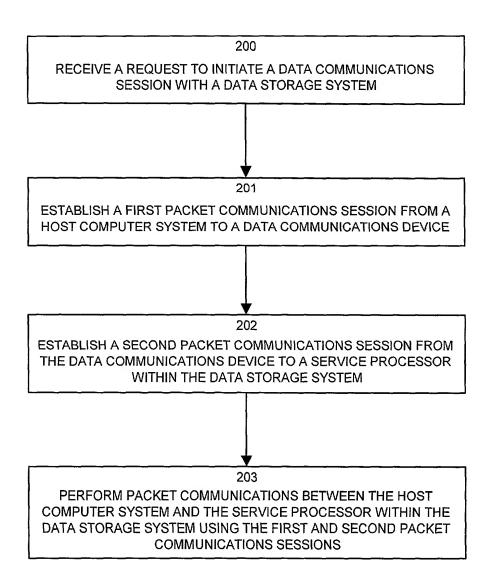


FIG. 1



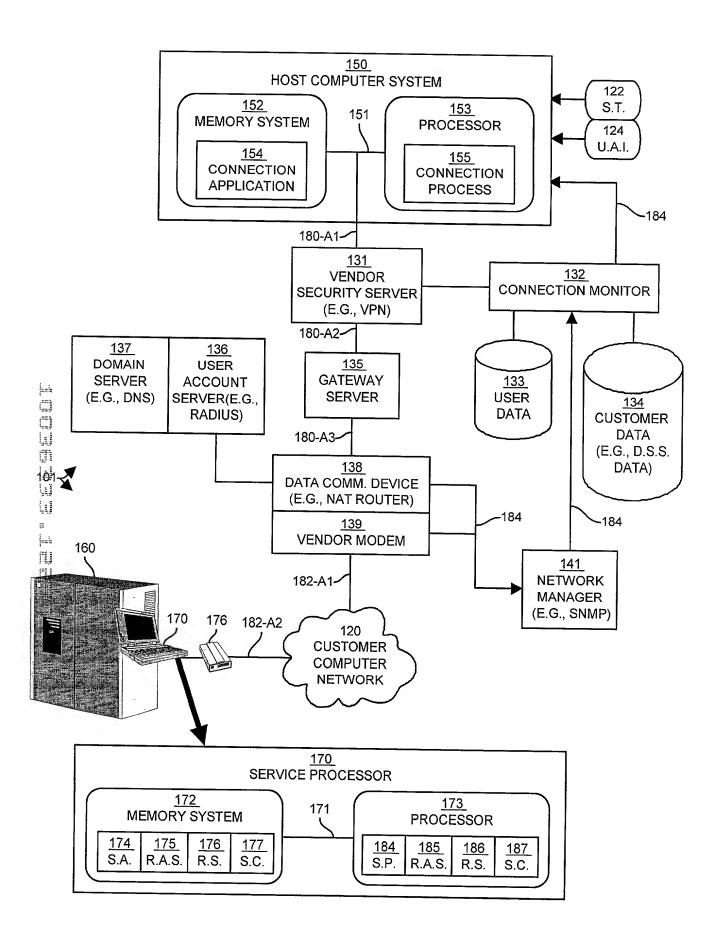


FIG. 3

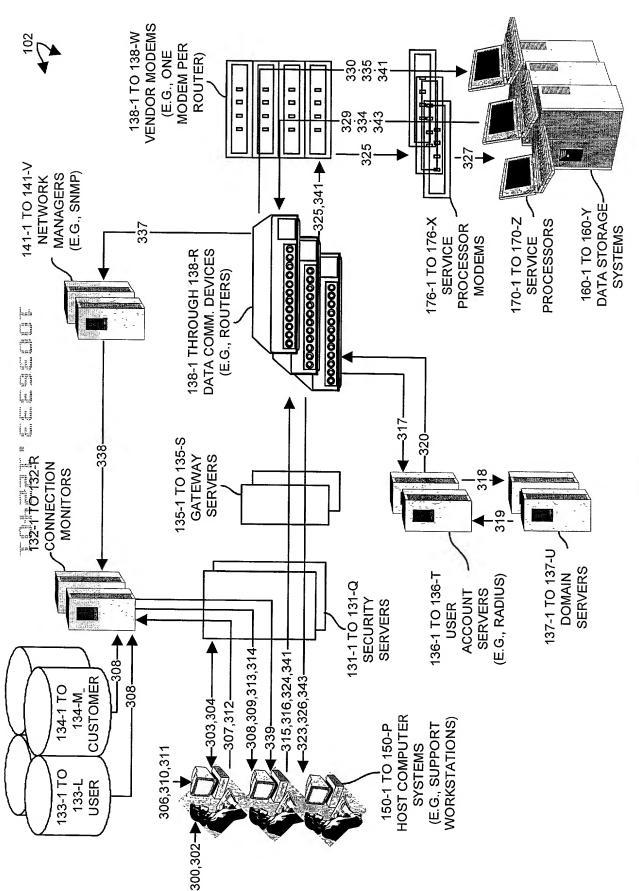


FIG. 4

FIG. 5

THE SET OF DATA STORAGE SYSTEM IDENTITIES

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311

CONNECTION PROCESS RECEIVES USER INSTRUCTION TO ESTABLISH A COMMUNICATION SESSION WITH THE SELECTED DATA STORAGE SYSTEM

312

CONNECTION PROCESS PROVIDES A REQUEST TO CONNECTION MONITOR FOR AN ADDRESS OF A DATA COMMUNICATIONS DEVICE THAT IS AUTHORIZED TO ESTABLISH A PACKET COMMUNICATIONS SESSION WITH THE SELECTED DATA STORAGE SYSTEM (E.G., REQUEST CAN INCLUDE:

I) USER AUTHENTICATION INFORMATION SUCH AS USER ID/PASSWORD;
II) CUSTOMER INFORMATION SUCH AS CUSTOMER AND SITE NAME;
III) DATA STORAGE SYSTEM CONNECTION INFORMATION SUCH AS PHONE NUMBER OF SERVICE PROCESSOR MODEM)

313

CONNECTION MONITOR RECEIVES REQUEST AND DETERMINES NEXT AVAILABLE DATA COMMUNICATIONS DEVICE ADDRESS (E.G., NAT ROUTER IP ADDRESS) AND RETURNS THE ADDRESS OF THE DATA COMMUNICATIONS DEVICE TO THE CONNECTION PROCESS

314

CONNECTION PROCESS RECEIVES THE ADDRESS OF THE DATA COMMUNICATIONS DEVICE

315

CONNECTION PROCESS INITIATES A FIRST PACKET COMMUNICATION SESSION (E.G., TELNET SESSION) FROM THE HOST COMPUTER SYSTEM USING THE CONNECTION INFORMATION (E.G., ADDRESS) FOR THE DATA COMMUNICATIONS DEVICE

316

CONNECTION PROCESS PROVIDES FIRST PACKET COMMUNICATIONS SESSION AUTHENTICATION INFORMATION (E.G., USER AUTHENTICATION INFORMATION) TO THE DATA COMMUNICATIONS DEVICE (E.G., VIA THE TELNET SESSION)

317

DATA COMMUNICATION DEVICE (E.G., ROUTER 137) COMMUNICATES WITH AN AUTHENTICATION COMPUTER SYSTEM (E.G., USER ACCOUNT SERVER 135, SUCH AS A RADIUS SERVER) TO VERIFY IF THE USER OF THE HOST COMPUTER SYSTEM IDENTIFIED IN THE USER AUTHENTICATION INFORMATION IS AUTHORIZED TO CAUSE THE DATA COMMUNICATIONS DEVICE TO ESTABLISH COMMUNICATION TO THE DATA STORAGE SYSTEM (E.G., VIA FIRST AND SECOND PACKET COMMUNICATIONS SESSIONS)

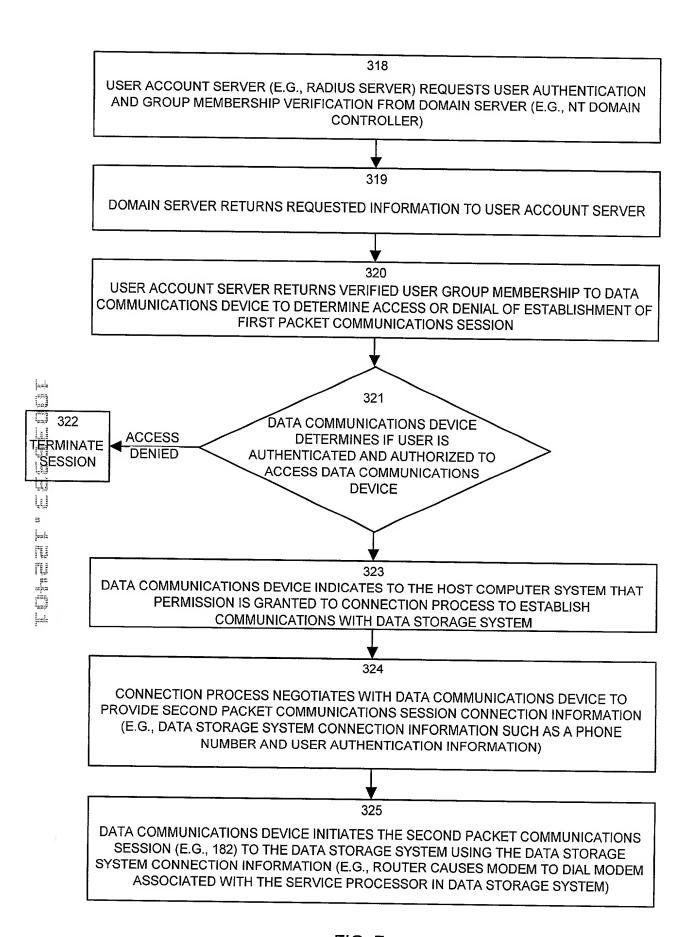


FIG. 7

